

SUMMARY OF FINDINGS

Site and Building Assessment

Dore and Whittier, Inc. has performed an assessment of four school buildings: the Hanover High School, Sylvester Elementary School, Salmond School, and Curtis School along with their respective sites as part of this feasibility study.

Summarized below are the site and building issues/deficiencies for each of the schools that we reviewed as part of this study:

Hanover High School

Originally constructed in 1958 with an addition in 1962. The building is approximately 116,375 sf in area with 700 students for grades 9 through 12. General facility comments are as follows:

1. The site perimeter has wetland conditions, which will significantly limit the options for expansion.
2. Overall the building appears to be structurally sound, although some cracks were noted. Further investigation is needed at these locations.
3. A review of the building exterior found that overall the building was in good condition, with the exception of:
 - a. the severely deteriorated single-pane non-thermal metal window system (source of extreme heat loss)
 - b. rotting wood exterior doors; some were inoperable. This is a life safety concern particularly at the doors that lead out from a stairway into the courtyard.
 - c. some minor cracks and spalling noted.
4. The roof was found to be in good to fair condition overall with particular areas and components in poor condition. The majority of the roof is ballasted EPDM rubber membrane roof, while the band room was recently re-roofed with fully adhered EPDM rubber membrane. General comments are as follows:
 - a. Workmanship over most of the roof was noted to be very poor, particularly the fascia, which was not fastened properly and had blown off as well as the membrane at the edge which was not sealed properly. Thus both deficient workmanship items expose the interior of the building to potential leaks.
 - b. The ballasted roofing system for the gym roof is inappropriate for the condition; the slope is too steep for a ballasted roof system. The workmanship is very poor. Holes and gaps in the membrane were noted at several locations, some as large as 12" long. The membrane was sparsely ballasted with stone and what appeared to be old stone walkway pads (12" x 18"). Leaks are inevitable with the roof in this condition.

- c. The expansion joint between the 1958 building and 1964 addition does not appear to be per industry standards and had a notable
5. Stairway exits were blocked with stored items and with a hardware lock-down bar. This presents a serious life-safety concern as these exits are required emergency exits for occupants from the 2nd floor.
6. After a review of the AHERA report, it was noted that spray-on fireproofing containing asbestos was still in place at steel beams in the 1964 wing. This type of spray-on material is very friable, meaning it is easily disturbed and particles may be released into the air easily. This is a concern that should be addressed in the next available opportunity. Other asbestos containing material such as plaster was noted in other areas of the school. This should be removed at the time of any renovation project but is not as much of an immediate concern as the spray-on fireproofing.
7. The size of the library appears to be below state minimum guidelines.
8. A number of spaces are being used differently than originally intended. Classrooms are now used by the Guidance office and the student council storage room was previously a toilet room, music practice rooms are now used for storage.
9. The shop program has been gaining more popularity in the area of technical drawing, industrial and visual arts, requiring more space. Changes in technology education require changes in curriculum as well as different equipment and space needs.
10. There is a lack of storage space for general use and classroom use.
11. Nurse's room is very small and offers almost no privacy for exams and personal discussion with the nurse.
12. Auditorium stage wings are small; inadequate space for storage or sets.
13. The kitchen dishwashing area is located directly in the middle of the kitchen; this results in an inefficient/less than ideal work area for food preparation and food serving.
14. Kitchen dry storage space and freezer storage space is limited.
15. Corridor and stair doors are not smoke or fire rated: are not labeled, do not have latch, no panic devices, are held open with wood wedges.
16. The emergency systems (emergency lighting and exit signs) are in violation of current codes for a number of reasons.
17. Concerns with the electrical wiring have been reported due to a number of problems in the past.
18. Inadequate ventilation and air quality in a number of spaces, including the kitchen, industrial arts areas, and other rooms throughout the building. See HVAC section for more information

Sylvester Elementary School

Originally Constructed in 1927 with an addition in 1955. General facility comments are as follows:

1. The site is limited with parking and site circulation as a safety concern.
2. The exterior of the building is generally in very good condition considering the age, with the exception of the deteriorating single-pane wood windows and failing concrete steps, rusted and failing steel lintels at cafeteria windows.
3. Generally speaking most of the building system components are original with few exceptions. This is a continual problem for maintenance as parts and components are difficult to find and many of the systems fail often.
4. The cast-iron steam radiators and exposed piping in the corridors and stairs present a safety concern for the students as one could easily get burned.
5. The structural condition of the gym floor/cafeteria ceiling needs further evaluation.
6. The entire below-grade level of the school does not meet current Life Safety code for classroom use as the height of windows is above the minimum.
7. Entire building is not handicap accessible.
8. Stair guardrails and handrail do not meet current life safety code requirements.
9. The glue-on ceiling tiles are a continual problem for maintenance staff as they become loose and fall easily.
10. The school does not have adequate space for Art, Music and Gym programs, thus the students must walk to nearby Center Elementary School for these programs.
11. Lack of classroom and general storage space. Lack of space for backpacks/cubby units.
12. Nurse's office is very small and offers no privacy for students.
13. Lack of conference space
14. Lack of administrative work space. Copiers and work tables are currently located in the gym/auditorium.
15. The first floor framing other than the corridors and main entry are wood framed. These should have a 1-hour fire rating.
16. The auditorium, cafeteria, and library do not have the required 2-hour fire ratings to meet current code.
17. Plaster and paint in some areas are chipping off of the wall. Plaster has been tested positive for asbestos. Paint is highly likely to contain lead.

Salmond School

This building is currently being used for temporarily housing the Hanover Public Library while a new Library is being constructed. The building is in overall good condition with no apparent structural concerns. General items of concern are as follows:

1. The brick appeared to be in generally good condition considering the age.
2. Windows are mostly original, single pane wood windows with peeling paint and deteriorating wood.
3. Some doors are original, wood doors with knob handles, no closers and are in fair to good condition. Recommend replacement.
4. Since the building is currently not being used as a school, a full evaluation on space use could not be performed. Our comments as they would pertain to future use as a school are as follows:
 - a) The school does not have a gym, art, music, kitchen, cafeteria, or library space.
 - b) The size of the rooms appeared to be small according to state standards for an elementary school.
 - c) Lack of classroom storage space.
5. The entire building was not accessible to the disabled.
6. The entire below-grade level of the school would not be acceptable for classroom use (by current Life Safety codes) as the sill height of the windows is at least 2 feet above the maximum allowed (3'-6").
7. Building is almost all wood floor framing with no sprinkler system installed.

Curtis School (School District Offices)

Originally one of the Town's first elementary schools, it was constructed in 1896 and is approximately 5,000 sf. in area (including the garage). The building now houses the school district offices.

General items of concern and observations are as follows:

1. Asphalt shingles were noted in several locations around the chimneys to be lifting and in one particular area on the front side of the building an entire section of shingles (3' x 4') was sliding off of the roof, exposing the wood substrate to the elements. We recommend that this be addressed immediately to prevent leaks into the building and additional damage.

2. Wood shakes at the rear of the building are severely weathered and brittle and should be replaced.
3. Remaining portions of original exterior wood trim exhibit peeling paint and deteriorating wood.
4. Since the building is currently not being used as a school, a full evaluation on space use could not be performed. Our comments as they would pertain to future use as a school are as follows:
 - a. The building does not have a gym, art, music, kitchen, cafeteria, or library space. Due to the limited size of the building and the inability to use the lower level, the building does not lend itself to being used for school use.
5. The entire building is not accessible to the disabled.
6. The entire below-grade level of the school would not be acceptable for classroom use.
7. Floor to ceiling height (head clearance) at stairs is 5 ft, well below the 7'6" minimum.
8. Building is entirely wood construction with no sprinkler system installed.
9. Exit corridor in basement narrows to 30" at rear exit. Not in compliance with current code.
10. Although the building's fire alarm system appears to have been recently upgraded, the egress path at the rear of the main level requires the occupant to step 1 ft up onto a threshold, over exposed fin-tube radiation, and onto a wood platform where one now must travel down non-compliant stairs, through piles of stored items and out the garage door. This path of egress is a safety concern and is not compliant with current codes.